

"A CITIZEN'S VIEW OF BIG RIVER USES"

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by

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Nothing is more popular in American life today than poll-taking -- unless it is evaluating them and quoting them. No issue of major national importance has been ignored in this trend, and certainly not the environment. Varying size groups of people have been asked such questions as: What priority do you give to achieving environmental quality? Are you willing to support pollution abatement through the payment of additional taxes or increased product cost? But, to my knowledge, no group of Americans has been scientifically quizzed on the question posed to me today -- what do people want in planning for the use of a big river? Even if there were such an attempt I suspect it would prove even less than most polls about what the public wants and what motivates us. The answers would vary significantly according to where people live, how they earn a living, how much they know or understand about water resource management.

This is all my way of saying that to attempt to speak for any segment of the public is a dangerous game and to attempt to speak for THE public places one in an untenable position. Nevertheless, having been given this assignment, I will be brash enough to forge ahead, on the basis of what the League of Women Voters has learned and observed about such matters over the past 16 years of its involvement in water resources.

Over this period of nearly two decades we have seen public attitudes shift and change decidedly. Therefore, I am going to try to confine my remarks to what seem to me to be the emerging concerns and attitudes about large basin management. I note that the theme for this afternoon's session is "The Missouri River -- A Changing Water Resource." It's that word "changing" which is significant, for it implies new concepts of use, new problems in management, and new attitudes about the implementation of decisions.

As long ago as 1944, when the Flood Control Act was approved by Congress, recognition was given to the multi-purpose nature of water resource development. At that time major objectives of the basin-wide plan for the Missouri were stated as follows:

- 1) "Storage of 110 million acre-feet of water in more than 100 reservoirs for multi-purpose uses;
- 2) Irrigation of 3.5 million acres of new land;
- 3) Flood protection;
- 4) River stabilization and navigation improvement;
- 5) Hydroelectric power development for 3 million kilowatts;
- 6) Improved water supply, pollution abatement, recreation and fish and wildlife propagation;
- 7) Land, water and forest conservation, through erosion prevention and water flow retardation."

By 1960 in a progress report on projects, the Corps of Engineers said, "Progress of development of the basin plan has already resulted in creation of a system of 6 (main) reservoirs and a number of tributary reservoirs which now provide such major benefits as flood control, a reserve of water for greatly expanded irrigation, sustained flow for supply and sanitation, and generation of hydroelectric power; summer releases to support a rapidly expanding navigation industry which is already utilizing the stabilized and improved river."

Obviously significant steps have been taken toward achieving most of the goals of the basin wide plan. However, a citizen might well ask some pointed questions about these developments. For instance, are basin-wide objectives followed in every situation? If so, why has there been so little reduction in pollution? What happens when a river channel is stabilized? Do all users of the river benefit to some degree? I think the first thing citizens want to be assured of is that those who plan and decide on water uses in the Missouri Basin consider the full range of alternatives for any given use in any particular section of the river.

A few years ago in another heavily populated basin, the Susquehanna, I worked with the InterLeague Council there in an attempt to determine some guidelines for evaluating comprehensive planning for the basin. They are, I believe, also relevant to judging plans for the Missouri Basin or any section of it. We decided to ask such questions as:

- 1) What is the purpose of the plan?
- 2) Is it a unified plan?
- 3) Does the plan
 - a) take into account the many needs for water, and
 - b) provide for the full variety of uses?
- 4) Does the plan integrate land and water uses?
- 5) Is the plan consistent with current laws and enforcement policies?
- 6) Will the plan
 - a) resolve conflicts between opposing interests, or
 - b) provide a plan for resolution of such conflicts?
- 7) Does the plan provide a method for financing
 - a) continuation of the planning function, and
 - b) projects necessary to put the plan into effect?
- 8) Does the plan have sufficient creativity and drama to capture the public imagination?

Before deciding upon these criteria for judging a proposed plan, League members also decided they needed to make some value judgements about the environment they desired. So they asked themselves, and the public these questions:

- 1) What are the over-all goals for the area?
- 2) What are the best major long-range uses of the river?
- 3) What weight should be given to such factors as: water supply, ecology, flood control, fish and wildlife recreation, and employment?

The philosophy behind both the questions and the answers -- that citizens want to be a part of the decisions and they they want a full range of alternatives considered -- has grown in acceptance in the last few years -- this is one of the changes -- but somehow the implementation of this philosophy still seems to be lagging.

One of the current quotations which has been considerable overdone, but which is nevertheless true, is the one which says that everything is related to everything else. This recognition is another of the changes which have taken place. Nowhere is this unity easier to prove than when we take a look at how water management and land planning are inter-related. The most obvious factor in the situation facing both water and land use planners is that the decisions which are made on both water uses and land sites will affect water supply and quality for years to come, perhaps forever. In the Missouri Basin demands upon land use which involve water choices are primarily those for projects -- irrigation, flood control, urban development -- although there are many others as well.

In the report of the Commission on Population Growth, Population and the American Future, we are reminded that "growing population and economic activity will cause the area of water shortage to spread eastward and northward across the country in the decades ahead." This prospect gives great importance to consideration of long and short range effects of water resource projects on air and water quality. We are all aware that dams for water storage and hydro-electric sites, interbasin transfer, straightening of channels, and large scale withdrawal of ground water are some of the more common water resource projects. Unfortunately not enough attention has been paid to some of the possible effects of these decisions on the rest of the physical world.

Impoundment of water by dams can alter water supplies for a region by reducing downstream flows, altering water tables and promoting evaporation of impounded water through exposure of the water surface to the atmosphere, especially in arid regions. Dams trap sediments, reducing the effective storage capacity of the impoundment. Dam sites need to be carefully surveyed for subsurface structural ability to withstand great pressure in order to avoid dam failures and damage downstream. They can block fish spawning runs. Straightening and deepening of natural stream channels may alter water levels and velocity which in turn affects rates of erosion and sedimentation. Interbasin transfer can alter chemical hydrological environments, such as salinity and possibly other natural patterns of vegetation, climate, etc., depending upon the scale of the project.

The use of fertilizers, pesticides, insecticides and herbicides may produce healthy food but not necessarily healthy fish and animals on adjacent lands, and their use may be detrimental to overall water quality. The practice of channelization may cause increased flooding and sedimentation downstream. Use of improved irrigation and drainage techniques is important to prevent salts and plant nutrients from reducing water quality downstream.

Although water quantity is a first consideration in land use planning, water quality needs to be better appraised. Too rapid growth taxes the capacity of community treatment facilities, and industries, subdivisions, and shopping centers discharge inadequately treated wastes into the water with serious effects on health, property, vegetation, and wildlife. Large scale development can have regional effects on water supply -- withdrawal of ground water in one state can effect the availability of ground water in another state. Depletion of stored ground water must be considered every time a land use decision is made. Often the effect of urban development is not fully assessed and cities and farms compete for the same water. Higher densities and large areas of paving increase urban runoff and simultaneously inhibit ground water recharge -- thereby reducing the regional water supply.

One could go on endlessly detailing the need to consider land for open space, land for transportation, land for water disposal, land for power generation sites -- and in the course of it show that in every land use demand is a comparable commitment in terms of water usage.

This is the way things look to the general public and there is grave concern about how these conflicting demands will be adjudicated. Ever since 1965 the League of Women Voters has been the recipient of a technical training grant to conduct conferences for community leaders on land and water issues. In the course of doing this we have sponsored such projects in every section of the country and all or part of 42 states. In 1969 we sponsored one of these projects for the Upper Missouri Basin in Omaha, Nebraska. One of the permanent parts of these projects has been a panel of experts which presents the full range of competing demands on uses for the water of the region with due consideration for the related land effects. We have tried to assist community leaders in determining how to decide priorities and preferences for reconciling these competing demands.

How do we tell people to approach these difficult choices? We suggest to them that there are perhaps five basic ingredients which are necessary to reaching wise decisions on good planning for water resources management. We include such things as:

- 1) Ample information about practical alternatives
- 2) Evaluation of the demands which various segments of the public place on specific uses
- 3) An attempt to maintain flexibility for the future
- 4) Public involvement at every step of the planning process
- 5) Public discussion and understanding of plans, options, and the environmental impact of the choices.

I very much doubt that there is anything in that list with which anyone here would disagree, but somehow the application of this to a concrete proposal becomes infinitely more difficult. This is especially true when we attempt to use these principles in evaluating water resource projects. It has been the strong desire of League members for many years to have intangible values as a part of the consideration as well as to see the public presented with alternative plans. In fact back in 1969 in testimony to the National Water Commission we said:

"We think the time is ripe for devising new ways to evaluate water resource projects. Economic efficiency is no longer acceptable as the sole measure. The cost/benefit ratio should be only one tool. If it is retained, more value in the cost side should be assigned for benefits foregone and values lost when projects are constructed. Enhancing the nation's material wealth may be of lesser importance than fulfilling the desires of the people of the region; enriching entrepreneurs may be of less importance than preserving irreplaceable values for public enjoyment. Such value judgements must be made by citizens and not by technical experts."

Now the Water Resources Council has completed its Special Task Force Report and is proposing new principles and standards for the preparation of river basin plans and for the formulation and evaluation of federal water and related land resources projects. These were open to comment until March 31, and thus citizens and civic organizations have had an unique opportunity to join with government in shaping new rules. The League of Women Voters reviewed these proposals and submitted a statement for the record, from which I quote:

"We are glad to see inherent in the Proposed Principles and Standards for water and land resources planning a more tangible and effective route for governmental consideration of benefits other than economic efficiency and cost. Perhaps the greatest step forward in the judgemental process necessary is that of a change in the discount rate to reflect values society places on benefits and costs occurring in the future as compared with the present. We are greatly encouraged by the emphasis on broader basis and more public participation."

It seems to me that the various accounts proposed by the Water Resources Council provide a methodology for consideration of social and economic values in water resources management and that this kind of built-in examination of alternative values and costs is more meaningful than an eyeball-to-eyeball confrontation between developers and environmentalists.

In the same testimony, regarding citizen participation, we said:

"The League of Women Voters of the United States believes that citizen participation in policy decisions must be increased, and by this we mean participation of all concerned citizens who have a sustained interest in water resources and related land use. We think the provisions for public participation in plan formulation are neither adequate nor sufficiently specific as set forth in the proposed principles and standards.

Public participation in plan formulation should be made mandatory from the beginning. Therefore, we suggest changing the sentence on page 24170, column 2, under 4. Participation, beginning 'Direct input from the public...' to read 'Direct input from the public at the national, regional, and local level is paramount in view of multi-objectives and must be pursued vigorously through appropriate means of announcements in news media, public hearings, public meetings, information programs, citizens committees, etc. Further, the public reaction to the beneficial and adverse effects of each alternative plan must be displayed in the system of accounts whenever requested by interested members of the public.' Only with this change will the principles and standards for planning make absolutely sure that the public and their chosen environmental leaders will be able to study and review each alternative and thus be able to express informed views. Past experience has shown that direct involvement of the public in decision-making from the beginning will often pave the way for ready public acceptance of this final decision."

In another western state where water problems are of urgent concern, the Director of Water Resources is quoted as saying, "Water quality and regional development are on a collision course." If this is true, and all indications are that it is, then the most important thing we need to consider at this conference is whether, by rational planning for both land and water, development can accelerate and water quality improve.

In regional planning for water resources we seek the best of all possible worlds -- one where planners will resolve the inevitable conflicts between opposing interests, opposing aims -- between development and non-development, between wise use and profligate tendencies, between economic necessity and idealistic philosophy. But planners neither can nor should make these decisions in a vacuum, neither knowing nor caring what people want. The purpose of comprehensive planning is to devise a pattern for economic and physical development, harmonious and well balanced in its use of land and water. Planners suggest corrective measures for existing problems and recommend priorities for improvement programs in order to guide growth along orderly lines. The master plan is a flexible guide for the making of all developmental decisions, public and private, but it rests on many earlier expressions of community preferences, on many choices between incompatible aspirations, on compromises and adjustments to gain necessary public support.

In recent years there has been increasing acceptance of the idea that planning and management of water and related land resources are best accomplished through some type of organization that cuts across traditional political boundaries and deals with resources in their geographic unity. To put this idea into practice has proved extraordinarily difficult. In the absence of a comprehensive plan, water management and land use programs and policies of separate jurisdictions frequently conflict to the point where plans of one are negated by action or inaction in another. Generally speaking, either a metropolitan area or a watershed would be better served by a unified plan for its water sources, by a plan that takes into account the many needs for water and provides for multiple uses. Yet there are few places where such a plan is being applied. All too often water plans are drawn by representatives of vested interests, by professional water and sewer engineers from municipalities, by industrial engineers, rather than by water resource and land use planners whose aim is to find the best utilization of the resource for the entire region.

It seems to me that the first step toward good water-land planning is to develop a truly creative regional plan; the second is to involve the people of the region; and the third is to establish some institutional arrangement, not only for making the plan but for putting it into effect.

We hear a great deal about comprehensive plans in the present time. Indeed we in the League are very fond of this term. We use it in our statement of position where we say, "In order to meet the present and future water needs of the people of the United States, the League of Women Voters believes... comprehensive planning, development and water management on a regional basis is essential to the optimum development of the nation's water resources."

But can regional planning (and remember a region can be large or small) for water resources be comprehensive if it includes the multiple uses of water but not the general use of land? Clearly the location of industries and recreation areas will affect costs of water supply and waste disposal in cities or the stream's watershed. The effects of land use choices on water management must be evaluated. The evaluation must be given weight in location decisions of industry and in land-use planning by local, state and regional planning agencies. Stream specialization to provide high quality recreational opportunities, for example, will be impossible without appropriate control of land use.

Any institutional machinery for comprehensive planning will need to deal with both water resources and land use controls and to influence both public and private decision-making wherever the two are interdependent. It seems to me that what we concerned citizens want in regional planning for water resources is a comprehensive plan that gives full consideration to water and related land resources of the area and involves citizens in the decision-making process. We want planners to provide us laymen with the information we need to make the hard choices from which there is no turning back. We want to know ahead of time the inconveniences, the regulations, and the costs that are involved. We want to be prepared to pay the price when we commit ourselves to the final goal.

At the beginning of my remarks I indicated that I would try to focus on the changing attitudes about the use of a big river. To summarize these as they look to one citizen's group, permit me to reiterate briefly.

- 1) Public attitudes about the values which should be given to varying uses are changing. People want to know and to understand the full range of possibilities and to be helped to choose among them the one to which they give the highest priority for their section of the river.
- 2) Public attitudes about the inter-relationships of one environmental action upon another are becoming more sophisticated. The plethora of reading material available about how water, air, land are related has led to people developing a new understanding of the need to consider the effects of actions and decisions on the uses of the big rivers, and the land and air around them, before becoming "locked in" to a specific course of action.
- 3) Public attitudes about planning as a solution to environmental problems are becoming somewhat jaundiced. It has not proved to be the panacea many thought it would and the extent to which the public is willing to attach creditability to plans for a large river basin depends upon the sensitivity and directness of those doing the planning now and in the future.
- 4) People are beginning to understand that water resource decisions are both political and economic and the pendulum seems to be swinging away from the more militant ecologist attitude to weighing economic and political factors in making decisions. However, it would be a mistake for either politicians or economists to assume that this means the public wants economic benefits to be the first consideration and the overriding element in policy determination. The public generally believes that the United States can have both a cleaner environment with provision for water uses of all types -- but this same public, which must pay the bill, wants to know what it will cost -- in resources, in jobs, in political trade-offs.